DOCUMENT RESUME

ED 374 678 FL 022 451

AUTHOR Ihde, Thomas W.
TITLE Error Correction in L1 and L2 Language Learning.
PUB DATE Aug 93
NOTE 13p.; Revised version of a paper presented at the World Congress of Applied Linguistics (10th, Amsterdam, The Netherlands, August 12, 1993).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Students; English (Second Language); *Error Correction; *Feedback; Higher Education; Native Speakers; Revision (Written Composition); *Second Language Learning; *Spelling; Testing; *Written Language

ABSTRACT

This paper addresses the effect of error correction on second language learning by focusing on feedback and it's effect on language acquisition. The paper deals specifically with the written form of the target language and looks at how the second language teacher can address errors that interfere with written communication in such a way that the student can benefit from the experience. A study is described that looked at: (1) how a student's ability to spell is affected by the level of correction (direct, indirect, no correction at all), and (2) if different forms of correction affect first- and second-language learners differently. Seventy-two students at Montclair State University (New Jersey) took part in the experiment, 36 of whom wee native speakers of English and 36 of whom had English as their second language. Data collected for the study included results of a test a post-test. All students scored similarly on the measures, regardless of the form of feedback provided. It is suggested that the results could have been different if the study had focused on the long-term results of feedback as well as the short term. (JL)

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ED 374 678

Error Correction in L1 and L2 Language Learning[1]

by THOMAS W. IHDE
(Bergen Community College/Trinity College Dublin)

This paper seeks to address the perennial question concerning the effect of error correction on second language learners. Although this theme can be viewed from many perspectives, feedback and it's effect on language acquisition will be the main topic of this paper.

The goal of any second language classroom is to aid the students in acquiring fluency in the target language. This paper will deal exclusively with the written form of the target language. Fluency in the written language for a non-native speaker is considered by many to be the most difficult of the four basic skills: listening, speaking, reading, and writing. Fluency here is defined as the ability to communicate effectively. Errors in syntax, lexical choices, and orthography only become significant when they interfere with getting the message across.

The question which this paper seeks to answer is as follows: When errors do interfere with written communication, how can the second language teacher address them in such a way that the student can benefit from the experience?

In viewing the literature that spans the past fifty years one can find many references to and much advice about how teachers should treat their students' errors. References include suggestions that errors should be corrected meticulously, corrected with regard for certain pedagogical criteria, corrected with communication in mind, or not corrected at all.

FL022451

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When the prevailing language learning approach was behaviorist, errors were viewed as bad habits. The process of language learning was an effort to overcome the habits of one's first language so as to successfully acquire the new habits of the target language. By studying the similarities and differences between the L1 and the L2 it was hoped that course designers could predict what areas of the L2 would cause difficulty. This difficulty was termed "negative transfer" and the entire process was called contrastive analysis. Errors caused by native language interference were to be avoided or minimized (Larsen-Freeman & Long 1991, pp. 53-55). This was done to a large part by taking away the creative capacity of the learner and by engaging him or her in a variety of drills involving listening, memorization through repetition, and the use of recorded pattern drills ensuring that errors would be kept to a minimum (Richardson 1983, p. 53).

With the advent of Chomsky's response to behaviorists (see Chomsky 1959), language acquisition became seen as rule driven rather than the process of habit formation. At this point, one did not assume that all errors had their origin in L1 interference. One began to recognize the role of developmental errors in the target language. Rather than predicting possible errors, linguists began with the actual errors so as to try to understand the learning process. This approach to analyzing learner data was called error analysis (Larsen-Freeman & Long 1991, pp. 56-58). During this period, the word error encompassed both the idea of mistakes and errors as traditionally defined. Errors were seen as being a failure in linguistic competence or *langue* (see Svartvik 1973). They were reported common in both the language of children and students of a second language. Errors were caused by inadequate knowledge of the rules of the target language. The child

or L2 learner would not be aware of their errors and if corrected would usually continue committing the error (Corder 1981, p. 10).

Mistakes on the other hand were attributed to lapses in the common patterns of performance or *parole*. Whereas errors were most commonly associated with non-fluent learners, one would identify mistakes with fluent speakers be they L1 or L2 (see Svartvik 1973). Mistakes were in no way systematic, but rather they were reported as occurring randomly. The speaker or writer would often be aware of having made a mistake and would have no difficulty in correcting it (Corder 1981, p. 10).

Lalande suggested the idea of comprehensive corrections in his 1982 article (pp. 140-149). He pointed out that the manner in which most instructors correct student errors is inconsistent. He claimed, "Unless all errors are identified, the faulty linguistic structures, rather than the correct ones, may become ingrained in the student's interlanguage system" (p. 140). Interlanguage is the dialectal form of speech common to learners of a second language. "Language-learner language" as it is sometimes called differs from other dialects in that it does not belong to any identifiable social group and it differs depending on the level of the language learner. See Corder 1978 (p. 72). Interlanguage is seen as a continuum of development moving from one language to the other. As with children learning their first language, many see the progression of the second language learner as following some built in syllabus (p. 77). Errors in this case are seen as dialectal and not erroneous.

In reviewing the literature, other writers showed greater tolerance for errors. Many questioned total correction while others noted that students did not always learn from all the

correcting that was taking place. In an effort to home in on those errors that were the most damaging, some claimed that more attention needed to be given to recurring errors than to individual errors (Hendrickson 1980).

Burt and Kiparsky (1974) distinguished global errors from local errors. Global errors were those that cause confusion in the mind of the reader as to the relationship between clauses. Local errors on the other hand were errors found within a clause. It was suggested that perhaps students should first learn to correct global errors while instructors tolerate local errors.

In the general movement toward communicative views, one thing did not change and that was researchers' continued concern to aid students in successfully acquiring the target language. According to Krashen most of what might have been termed the ability to speak fluently in a second language could not be taught, but rather it had to be acquired (Larsen-Freeman & Long 1991, p. 301). In learning languages following the 'natural approach' listening and speaking skills took primary importance. Yet whereas oral fluency could be obtained by mingling with native speakers, learning to read and write most often took place in a formal educational environment (Ingram 1975, p. 218). Though some pointed out the importance of developmental sequences, research has shown that if a student is ready to acquire a certain communicative ability in the target language, the acquisition of this element can be sped up through the aid of an instructor (Larsen-Freeman & Long 1991, p. 312)

Omaggio, considering the aims of the student, supported the idea of correcting errors at an early stage. If the language learner wanted to obtain near-native fluency, than

tolerance for errors would have to be low. Omaggio claimed that if errors were not corrected at an early stage, fossilization would set in obstructing the learner from ever gaining a high level of proficiency in the target language (1986, p. 50).

Some, however, pointed out the negative effects of constant correction. Yet, correction was shown to be necessary when the errors began to confuse the recipient of the communication (Norris 1983, p. 3).

In 1958 E. B. Page published results of research carried out on 2,139 students (pp. 173-181). Though not directly associated with language learning, the experiment had serious implications for teachers in general. Page had teachers rank secondary students on a given test regardless of the subject they taught. Starting at the top of the list, teachers randomly wrote no comment, free comments (what ever came to mind), or a specified comment according to the grade obtained. Page found that students who received comments obtained higher scores on the following test than those who received no comments. It should be noted that there were many flaws in this experimental construct.

In 1967 Stiff carried out research into terminal and marginal errors, however no significance was found regarding writing quality. J. Hendrickson carried out an experiment involving global and local errors with similar results. Robb, Ross, and Shortreed in 1986 also found no significant difference when carrying out an experiment involving different types of feedback. Similarly in 1984, H. Semke using four forms of feedback found little significance between the approaches. However she did claim the possibility of error correction having had a negative effect on students when they were required to rewrite the essays after corrections were made. In contrast to the above, Lalande whose results were

published in 1982, found that student error codes were significantly more effective than traditional teacher corrections.

In 1992 Carroll, Swain, and Roberge published results of their experiment involving feedback and second language learners. Seventy-nine college students took part in an experiment which measured the effect of feedback on the learning of grammatical structures. The experimental group was corrected when answers were unacceptable. The comparison group was not corrected (see p. 180). Their results found that students in the experimental group were better able to recall correct answers in later sessions than those who made up the comparison group. However as Carroll, Swain, and Roberge admitted, the act of correcting aided the experimental group to memorize the correct answers, yet it did not aid them in learning the grammatical rules involved.

I decided to set up an experiment to see to what extent students learn from feedback. I wanted to test reactions to teacher feedback on spelling errors. The questions I sought to answer were as follows: 1. Is a student's ability to spell affected by the level of correction, be it direct, indirect, or no correction at all? 2. Do different forms of correction, direct, indirect, and the absence there of, affect L2 students differently than L1 students?

Seventy-two students took part in this experiment. All were students taking courses in the Linguistics Department at Montclair State University. Thirty-six of the informants had English as their second language and thirty-six were native speakers of English. Those individuals with English as an L2 were at the higher-intermediate level or above in regards to their English language studies. The majority of L2 students had Spanish as their L1. Teachers in the Linguistics Department volunteered their students for the experiment.

The first thirty-seven volunteers (nineteen L1 and eighteen L2) were given a spelling test consisting of fifty words. These words were taken from a standard spelling textbook for eleven year olds where they had been identified as challenging words for native speakers. Students were read a sentence first and then the word to spell. The purpose of this test was to identify twenty words that both L1 and L2 students commonly misspelled. No feedback was given to the volunteers. I allowed two months to pass before conducting the actual experiment to prevent any lingering effects (see Witte 1989, p. 289).

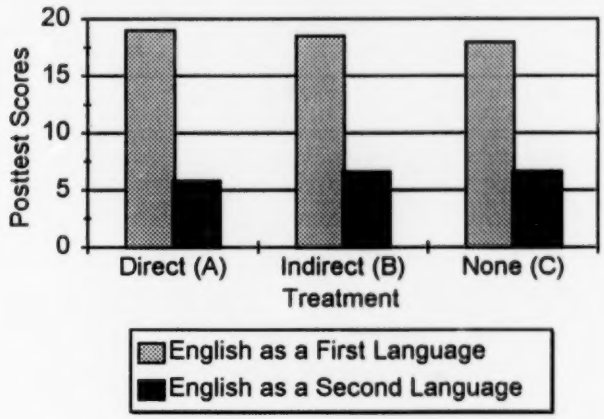
The mean on the above pre-test for L1 students was 43.84 correct answers out of 50 possible correct answers. Both the modal score and the median were 44 correct answers. The most common scores received by L2 students were 11 and 12 with the median at 12 and the mean at 15.06. From these data I constructed a twenty word post-test to be administered after the treatment session. The test was prerecorded with 20 second pauses between each sentence-word pair.

For the treatment I asked twenty-five L1 eleven-year olds to write a short story using the above defined twenty words. Upon choosing one of the stories that used each word correctly, I put in place of each of the twenty words one of the most common misspellings that had manifested itself during the pre-test.

I then made three copies of this short story. One was left as is, one had each of the twenty misspelled words circled, and one had each of the misspelled word circled and the correct spelling was penciled in for the student. Students were randomly placed in three groups, each to receive one of these treatments. Students were given a half hour and told to revise the short story. By revising, it was explained on the audio tape, the participants

were told to do anything that they would normally do if a paper was returned to them and they were given time to revise it. Each student was provided with a dictionary.

Feedback and Error Correction: Graph 1
(Ihde 1993)



After thirty minutes, the post-test was given. As explained above, the words were used in a sentence and then repeated. The scores received on the post-test make up the data for this experiment.

The data collected included 72 students who were subjected to the treatment and then tested using the post-test. There were 36 individuals in both the L1 and the L2 group and equal numbers of students made up each of the correction treatment columns. Although the results of the test are fairly obvious from Graph 1 and Table I, I subjected the data to a one-way ANOVA.

The seventy-two students as a whole scored similarly as can be seen in Table II regardless of the form of feedback provided. The same result was obtained when analyzing

the data separately. Neither the L2 sample (see Table III), nor the L1 sample (see Table IV) demonstrated any significance. There was clearly a significant difference between post-test scores of L2 and L1 students, however this was never in question. The data showed that for spelling errors there was no relationship between what type of feedback was provided and how the student improved in his ability to spell correctly.

TABLE I: Average number correct on the post test (n=72)

Method	Direct	Indirect	None	Total
L2	5.83	6.58	6.67	6.02
L1	18.75	18.50	17.92	18.54
Total	12.52	12.54	12.30	

TABLE II: ANOVA Table for entire sample (n=72)

Source	SS	df	MS	F
Between	0.99	2	0.50	0.10
Within	3299.88	69	47.82	
Total	3300.87	71		

[F(2,69) = 3.98, p>.05]

TABLE III: ANOVA Table for L2 sample (n=36)

Source	SS	df	MS	F
Between	5.05	2	2.53	0.18
Within	463.29	33	14.04	
Total	468.31	35		

[F(2,33) = 3.29, p>.05]

TABLE IV: ANOVA Table for L1 sample (n=36)

Source	SS	df	MS	F
Between	4.39	2	2.20	0.30
Within	224.17	33	6.79	
Total	228.56	35		

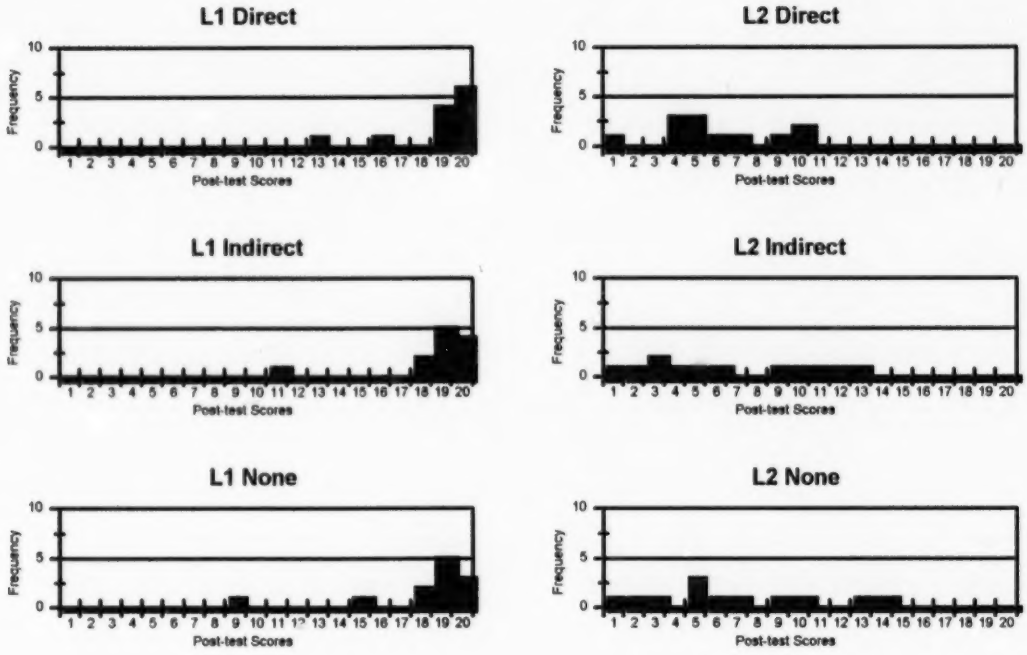
[F(2,33) = 3.29, p>.05]

Although the data in this study do not show any difference in students' spelling scores between the use of corrections and the lack of them, I am still skeptical on this topic. In future experiments I would prefer to test for long term effects as well as short term. It is

very possible that one of the treatment groups might have scored higher than the other two a month later. Another factor was the high score on the pre-test by L1 students. With an average of 43.84 out of 50, little room was left to measure significant differences between

Frequency of Scores: Graph 2

(Ihde 1993)



treatment groups. A third factor involved the type of words chosen. The words used in this experiment were irregular spelling words. Had they been regular spellings words, the results may have been different. In the future I would like to continue along this line of testing while confining my research to L2 students of one particular level so as to be able to reduce variables and increase the possibility of significant finding if such is the case.

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[1] This is a slightly edited version of a paper which was presented at the Tenth World Congress of Applied Linguistics (Association Internationale de Linguistique Appliquée) in Amsterdam on 12 August 1993 and later published in its original form in the French journal *Rule Syntactica* (October 1993, vol. 4, pp. 46-53).